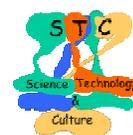


STC (Science, Technology & Culture: Empowering Learners)

Technology Competencies

(Adopted from the Boston Public Schools K-12)

Computer Operations
Use appropriate terminology (RAM, programming, modem, download)
Utilize desktop menu (finder/find, save, name, etc)
Differentiate use of mouse buttons for appropriate platform
Create Directories/Folders and subdirectories on local hard drive
Learn how to recognize file size
Navigate hard drive directories/folders, disk directories/folders
Save a file from a folder on to different drives
Open a file from a folder on to different drives
Use the COPY command to back up and share files/folders
Log onto a network using a personal password
Understand the user name, password and domain field of a logon box
Peripherals
Operate a Scanner
Utilize a digital camera
Recognize external computer peripherals (printer, zip drives)
Select a printer and print with appropriate page setup and orientation
Word Processing
Develop keyboarding efficiency
Format text with respect to size, spacing, style, justification and font
Save documents
Integrate spreadsheet and/or database files into a word processing document
Apply advanced word processing features such as columns, tables, and frames
Work simultaneously between multiple documents on the desktop
Utilize headers and footers where appropriate
Identify key commands (shortcuts)
Use print preview and page setup
Add and resize a graphic to word processing file
Transfer word processing skills to publishing flyers, brochures
Drawing and Painting
Adjust computer graphics using scale, size and shape
Spreadsheet
Understand the concept of a spreadsheet
Understand spreadsheet terminology (paste function)
Collect and organize data using spreadsheet software
Increase width of a column/row
Enter advanced formulas and functions (average)
Utilize sorting and filtering features
Utilize multiple sheets within a workbook

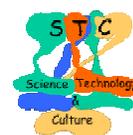


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Use spreadsheet to organize and calculate data
Produce a completed spreadsheet accompanied by a chart or graph
Electronic Research/Email
Organize bookmarks into folders for further reference
Retrieve information on a subject area topic via the Internet
Understand the function of a Search Engine
Navigate(WWW/Internet) using grade appropriate search engine(AltaVista, Lycos)
Utilize search strategies to locate and retrieve electronic information
Communicate electronically via email(Pen Pal Projects, Letter Writing)
Utilize internal email tools: spell check, font, size, priority, preferences
Learn to share text, graphics and sound files as attachments via e-mail systems
Multimedia
Identify the components of a multimedia presentation (text, graphic, sound video, and animation)
Develop an organizational plan and produce a slide show presentation
Import graphics/files into a presentation
Organize and rearrange slides
Use text transition and enhancement effects
Effectively time presentation
Web Authoring
Create a personal web page (in microsoft word)
Edit an existing web page
Create and apply links to and from other pages
Add text to a web page
Add graphics, clip art to a web page
Add a picture in JPEG format to a web page
Technology and Society
Work collaboratively at a computer with another student
Develop an awareness of acceptable use
Identifies the potential as well as the drawbacks of technology and its impact on education, home, and the work environment
<i>Source: the above competencies were adopted from Boston Public Schools</i>
http://oit.boston.k12.ma.us/competencies.htm

REFERENCES

1. ISTE National Educational Technology Standards for Students
http://cnets.iste.org/students/s_stands.html
2. American Association for the Advancement of Science. (2001). *Atlas of Science Literacy*. Washington, DC: American Association for the Advancement of Science & National Science Teachers Association.
3. National Research Council. 1996. *National Science Education Standards* Washington, DC: National Academy Press



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